



Laboratories for the 21st Century 2007 Annual Conference Call for Presenters

If you have in-depth knowledge and experience in the areas of sustainable laboratory and high performance facility design, engineering, equipment, and operation, we are excited to offer you the opportunity to present at the Labs21 2007 Annual Conference, which will take place October 2-4, 2007, in Charleston, South Carolina.

Abstract Deadline

To be considered for the call for presenters, you must submit an abstract by **March 23, 2007**.

Please note that if you are selected to present, you are required to attend the conference during your presentation time. If, for some reason, you are unavailable to attend, you must notify Labs21 by **August 31, 2007**, and provide a replacement presenter.

Submissions

You can submit your abstract through the online form at: <www.labs21century.gov/conf/call.htm>. For questions regarding the online Call for Presenters form, e-mail Labs21 at <labs21@erg.com> or call the conference message line at (703) 841-2194.

Selected presenters will be notified via e-mail by **May 25, 2007**.

Presentations

You can participate in the conference in up to three ways: (1) present a technical topic, (2) display a poster, or (3) submit a project for on site technical review and discussion during a *Roll Up Your Sleeves* Roundtable.

1. Call for Abstracts

If you are interested in making a formal technical presentation, you must submit an abstract on your proposed topic. When making your submission, we strongly encourage you to consider the *Suggested Presentation Topics* beginning on page 2; however, all topics will be considered.

Your allotted presentation time will be 20 minutes, with 10 minutes for audience questions and answers. If your abstract is selected, we will e-mail you guidelines to help you prepare a successful presentation.

If you are chosen as a presenter, you are also required to submit a copy of your PowerPoint presentation by **August 31, 2007**.

Please note that this is a reduced paper conference. We will make your abstract, speaker biography, and presentation available electronically if we receive an authorized waiver from you. Labs21 will not provide hard copies of any presenter's materials at the conference.

2. Call for Posters

If you have an interesting project that you would like to share with the laboratory community, we encourage you to participate in the Labs21 Poster Session. This unique forum will showcase some of the world's most innovative designs and how they embrace the Labs21 Approach to laboratory design.

Submission requirements are the same as those for submitting an abstract. If your poster is accepted, we will e-mail you the specific requirements for the size and nature of the display posters.

3. Call for Projects

This year, Labs21 will hold the third annual *Roll Up Your Sleeves* Roundtable. This informal working session will feature leading design experts who will “roll up their sleeves” and review your project—helping you solve your major architectural and/or engineering challenges. We encourage you to participate so that you can benefit from this invaluable technical input.

Submission requirements are the same as those for submitting an abstract or poster, but must include a description of the project’s specific architectural or engineering challenge.

Selection Criteria

A committee of laboratory and energy efficiency experts will review all submissions. Entries will be judged on the quality and merit of their technical content, the clarity of their composition, and their relevance to the Labs21 community. Special attention will be given to abstracts that focus on lessons learned and metrics, rather than those that simply highlight a project’s successes. Abstracts that focus singularly on the promotion of specific products or technologies are strongly discouraged*.

Incomplete submissions will not be considered. A completed application form includes a biography and an authorized release waiver for each speaker. Any materials submitted will not be returned.

*Please note that a new opportunity exists this year for exhibiting organizations interested in presenting their products and services to conference attendees. For more information on this opportunity, visit the Labs21 2007 Annual Conference Technology and Services Fair Web page at <www.labs21century.gov/conf/techfair.htm>.

Suggested Presentation Topics

Below are *Preferred* and *Other Topics* for various subject areas that you can use to develop your abstract. Abstracts submitted on the *Preferred Topics* will be given priority consideration in the abstract selection process. Abstracts on *Other Topics* or on issues not listed below will also be considered.

Sustainable Architecture

Preferred Topics:

- Good projects, so what's missing: The user's perspective
- Building information modeling: Transferring sustainable lab design to construction
- Modular labs: Are they effective? Where can they be used?

Other Topics:

- Human factors
- Sustainable research and development campuses
- Water conservation and recovery projects
- Effective storage strategies
- Laboratory planning
- Design for flexibility

International Perspectives

Preferred Topics:

- Using the Labs21 Approach against different common practices and national standards

Other Topics:

- Successful projects outside the United States
- Emerging technologies
- Unique tools and resources
- Creative design and engineering solutions

Evaluating and Managing Laboratory Performance

Preferred Topics:

- "Day-in-the-Life" of laboratory operations and maintenance (O&M): Do sustainable designs/engineered systems support O&M functionality?
- Assuring performance meets design goals: Facility user guides and other techniques

Other Topics:

- Commissioning and re-commissioning
- Environmental management systems (EMS)
- Laboratory O&M
- Performance benchmarking and LEED® for Labs
- Energy emissions accounting

Energy Supply, Renewables, and Reliability

Preferred Topics:

- Labs and research and development campuses: Distributed power and on site power providing reliability, security, and cost management
- Research Campuses: Aggregating regional demand to leverage new renewable energy installations
- Chemical recycling and reuse, chemical management, waste disposal, and related practices
- On site and building-integrated renewable energy technologies (daylighting and free cooling excluded)

Other Topics:

- Distributed power: The energy efficiency and sustainable advantages
- On site integrated renewable technologies: The efficiency and sustainable aspects of their use
- Uninterruptible power supply systems and options: Highlighting efficiency and sustainable aspects

Financing & Economics

Preferred Topics:

- Construction costs from start to finish: Trades, materials, and global competition: Can sustainable lab projects stay on budget and on time? Can they still be sustainable?
- Success Stories: Performance contracting and energy upgrades

Other Topics:

- Project financing and economics and their effects on achieving sustainable design and engineering
- Third party project financing and how it can ensure sustainable labs and related facilities
- Owner perspectives on achieving sustainable labs and related facilities

Laboratory Mechanical, Electrical, and Plumbing Systems

Preferred Topics:

- Projects being designed, built, and operated with hydronic heating and cooling: What are the sustainable aspects of this technique?
- How mechanical, electrical, and plumbing design practices will ensure a sustainable facility

Other Topics:

- Codes and standards for laboratories
- Fume hoods and ventilation systems
- Energy recovery
- Exhaust systems
- Heating and cooling systems
- Laboratory systems and controls
- Water conservation
- Lighting and daylighting systems

Laboratory Equipment, Supplies, and Furniture

Preferred Topics:

- Lab computing requirements and information storage: What are the energy provisions and efficiency strategies?
- Lab furniture: What is sustainable and functional? What are the improvements over conventional systems?
- Lab equipment: Plug loads, power planning, utility costs and equipment management
- Chemical and lab equipment storage: Combining management systems with facility design strategies to conserve resources

Other Topics:

- Efficient laboratory equipment
- Laboratory benchwork and cabinetry

Specialty Laboratories

Other Topics:

- Healthcare/hospitals
- Marine-based environments
- Genomics and infectious disease laboratories
- Plant and life sciences
- Teaching/universities
- Cleanrooms and data centers
- Nanotechnology
- Bio-technology and Bio-engineering

Abstract Publication Opportunity

Labs21 co-sponsor, the International Institute for Sustainable Laboratories (I²SL), is negotiating with *R&D Magazine* to publish selected abstracts from the Labs21 2007 Call for Presenters. When you apply for the Call for Presenters, your abstract will automatically be considered for inclusion in the *R&D Magazine Laboratory Design Handbook*. Additionally, if your abstract is one of the 20 that will be selected for the handbook, you will also be given the opportunity to write a full paper on your project, to be published on the I²SL Web site. For more information, visit the I²SL Web site at <www.i2sl.org/labs21/conference.html>.

How to Apply

To submit an abstract for the Labs21 2007 Annual Conference, please complete the online application form at <www.labs21century.gov/conf/call.htm>. All abstracts are due by **March 23, 2007**. Please be sure to include contact information and a biography for each presenter.

Please note, if you would like to submit more than one abstract, you must complete two separate online forms.

If you have any issues with the electronic abstract form, please contact Labs21 at <labs21@erg.com>.

Thank you for your interest and support of Labs21!